

COMPLETE LISTING OF CLAIMS

1. (Currently Amended) A hematopoietic growth factor delivery composition, the composition comprising:

a hematopoietic growth factor capable of stimulating hematopoietic cell activity when administered to a mammalian host;

a first biocompatible polymer and a liquid vehicle in which the first biocompatible polymer is at least partially soluble at some temperature, the first biocompatible polymer interacting with the liquid vehicle to impart reverse thermal viscosity behavior to the composition over at least some temperature range, so that the composition is in a lower-viscosity form when the temperature of the composition is at a first temperature within the range and the composition is in a higher-viscosity form when the temperature is at second temperature within the range that is higher than the first temperature; and

a second biocompatible polymer being a protective colloid that inhibits the dissolution into aqueous liquids of the first biocompatible polymer at least when the composition is in the higher-viscosity form;

wherein the liquid vehicle comprises from 60 weight percent to 96 weight percent of the composition, the first biocompatible polymer comprises from 5 weight percent to 33 weight percent of the composition, and the second biocompatible polymer comprises from 0.1 weight percent to 5 weight percent of the composition; and

wherein the hematopoietic growth factor comprises G-CSF, the first biocompatible polymer comprises a polyoxyalkylene block copolymer comprising at least one block of a polyoxyethylene and at least one block of a polyoxypropylene, and the second biocompatible polymer comprises a cellulosic polymer.

2. (Original) The hematopoietic growth factor delivery composition of Claim 1, wherein the first temperature is lower than 20 °C and the second temperature is higher than 25°C.

3. (Original) The hematopoietic growth factor delivery composition of Claim 2, wherein the first temperature is in a range of from 1°C to 20°C and the second temperature is higher than 25°C.

4. (Original) The hematopoietic growth factor delivery composition of Claim 3 wherein the second temperature is 37°C.

5. (Original) The hematopoietic growth factor delivery composition of Claim 4, wherein the higher-viscosity form has a viscosity that is at least 3 times as large as the viscosity of the lower-viscosity form.

6. (Original) The hematopoietic growth factor delivery composition of Claim 1, wherein the lower-viscosity form is a flowable medium and the higher-viscosity form is a gel.

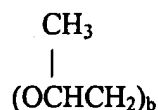
7. (Previously Amended) The hematopoietic growth factor delivery composition of Claim 6, wherein the second biocompatible polymer has an affinity for water such that the second biocompatible polymer inhibits deterioration of the gel by invasion of the composition by aqueous biologic fluids when the composition is administered to a biologic host.

8-13. (Cancelled)

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14. (Currently Amended) The hematopoietic growth factor delivery composition of Claim ~~13~~1, wherein the polyoxyethylene comprises at least 70 weight percent of the first biocompatible polymer.

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15. (Currently Amended) The hematopoietic growth factor delivery composition of claim ~~13~~1, wherein the polyoxypropylene has the formula $(C_3H_6O)_b$, where b is an integer.

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16. (Currently Amended) The hematopoietic growth factor delivery composition of claim ~~13~~1, wherein the polyoxypropylene has the formula



where b is an integer.

12
17. (Original) The hematopoietic growth factor delivery composition of Claim 1, wherein the second biocompatible polymer has a weight average molecular weight of at least 5,000 Daltons.

18-19. (Cancelled)

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20. (Currently Amended) The hematopoietic growth factor delivery composition of Claim ~~19~~1, wherein the cellulosic polymer comprises methylcellulose.

14 21. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 191, wherein the cellulosic polymer comprises hydroxymethylcellulose.

15 22. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 191, wherein the cellulosic polymer comprises hydroxyethylcellulose.

16 23. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 191, wherein the cellulosic polymer comprises hydroxypropyl cellulose.

17 24. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 191, wherein the cellulosic polymer comprises hydroxypropyl methylcellulose.

18 25. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 191, wherein the cellulosic polymer comprises carboxymethylcellulose.

19 26. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 191, wherein the ~~cellulosic~~^{second biocompatible} polymer comprises ethyl hydroxyethyl cellulose.

27-32. (Cancelled)

33. (Original) The hematopoietic growth factor delivery vehicle of Claim 1, wherein the second biocompatible polymer has a weight average molecular weight of at least 10,000 Daltons.

34. (Original) The hematopoietic growth factor delivery vehicle of Claim 1, wherein the liquid vehicle is an aqueous liquid.

35-46. (Cancelled)

47. (Original) The hematopoietic growth factor delivery vehicle of Claim 1, comprising an antigen.

48. (Currently Amended) A hematopoietic growth factor delivery composition, the composition comprising:

a hematopoietic growth factor capable of stimulating hematopoietic cell activity when administered to a host;

a first biocompatible polymer and a liquid vehicle in which the first biocompatible polymer is at least partially soluble at some temperature, the first biocompatible polymer interacting with the liquid vehicle to impart reverse thermal viscosity behavior to the composition over at least some temperature range, so that the composition is in a lower-viscosity form when the temperature of the composition is at a first temperature within the range and the composition is in a higher-viscosity form when the temperature is at second temperature within the range that is higher than the first temperature; and

a second biocompatible polymer being a protective colloid that inhibits the dissolution into aqueous liquids of the first biocompatible polymer at least when the composition is in the higher-viscosity form;

wherein the liquid vehicle comprises from 60 weight percent to 96 weight percent of the composition, the hematopoietic growth factor comprises from 0.00000001 weight percent to 0.000005 weight percent of the composition, the first biocompatible polymer comprises from 5 weight percent to 33 weight percent of the composition and the second biocompatible polymer comprises from 0.1 weight percent to 5 weight percent of the composition; and

wherein the hematopoietic growth factor comprises G-CSF, the first biocompatible polymer comprises a polyoxyalkylene block copolymer comprising at least one block of a polyoxyethylene and at least one block of a polyoxypropylene, and the second biocompatible polymer comprises a cellulosic polymer.

23 ~~49~~ (Original) The hematopoietic growth factor delivery composition of claim 1, wherein the composition is contained within an injection device that is actuatable to administer the composition to the host by injection.

8 ~~50~~ (Original) A method of packaging and storing the hematopoietic growth factor delivery composition of claim 6, comprising placing the composition in a container when the composition is in the form of the flowable medium and, after the placing, raising the temperature of the composition in the container to convert the composition to the gel for storage, wherein the gel form in the container can be converted back to the form of a flowable medium for administration to the host by lowering the temperature of the composition in the container.

51. (Cancelled)

32. (Original) The hematopoietic growth factor delivery composition of claim 1, wherein the host is a human.

33. (Previously Added) The hematopoietic growth factor delivery composition of Claim 48, wherein the first temperature is in a range of from 1°C to 20°C and the second temperature is in a range of from 25°C to 37°C.

34. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 48, wherein the second biocompatible polymer has an affinity for water such that the second biocompatible polymer inhibits deterioration of the gel by invasion of the composition by aqueous biologic fluids when the composition is administered to a biologic host.

55-58. (Cancelled)

59. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 48, wherein the cellulosic polymer comprises methylcellulose.

60. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 48, wherein the cellulosic polymer comprises hydroxymethylcellulose.

61. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 48, wherein the cellulosic polymer comprises hydroxyethylcellulose.

62. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 48, wherein the cellulosic polymer comprises hydroxypropyl cellulose.

63. (Previously Added) The hematopoietic growth factor delivery composition of Claim 48, wherein the cellulosic polymer comprises hydroxypropyl methylcellulose.

64. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 48, wherein the cellulosic polymer comprises carboxymethylcellulose.

65. (Currently Amended) The hematopoietic growth factor delivery composition of Claim 48, wherein the cellulosic polymer comprises ethyl hydroxyethyl cellulose.

66-84. (Cancelled)